



**Answer questions on your own paper in complete sentences (be sure to restate the question in your answer). These questions are due on tomorrow.**

1. Why is energy required for life?

2. How does energy enter the living world?

3. Visible white light is composed of what?

4. Which wavelength of visible light possesses the greatest energy value, and what is its color?

5. Which wavelength possesses the least energy value, and what is its color?

6. Which pigment(s), chlorophyll a, chlorophyll b, and/or carotenoids, did travel the farthest on the chromatography paper and why?

7. Which pigment(s) is least soluble in the solvent and how do you know?

8. Describe what happened to the original spot of the leaf pigment?

9. Is chlorophyll a or b more soluble in the chromatography solution?

10. Explain what happens to leaf pigments in the autumn.

11. Explain how paper chromatography works.

12. Besides separating plant pigments, what can chromatography be used for?

13. Draw a simulated chromatography from your results on your own paper.